

#5

FIGURE 1

AFP E1a and E1b Adenovirus Constructs

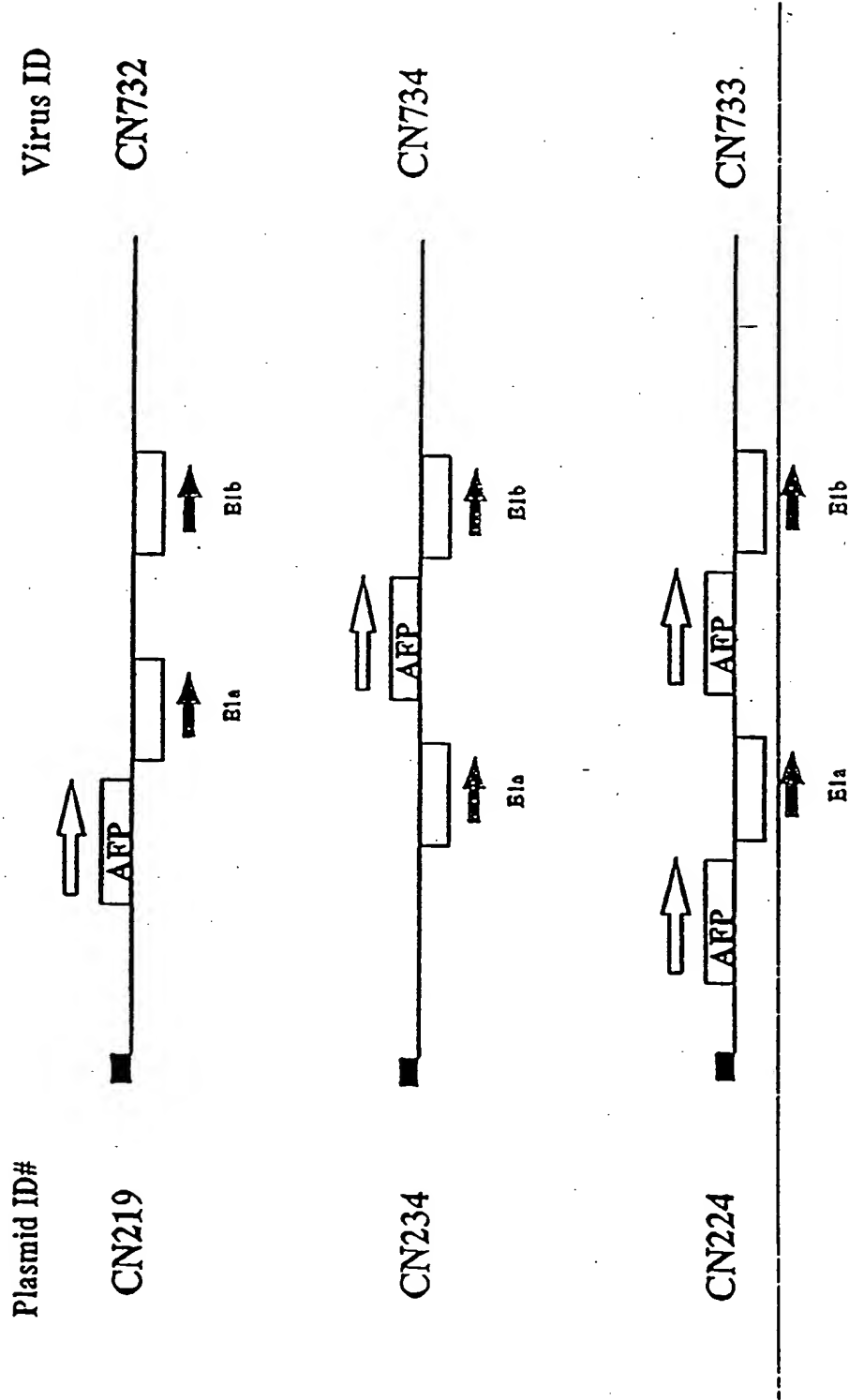


FIGURE 2A

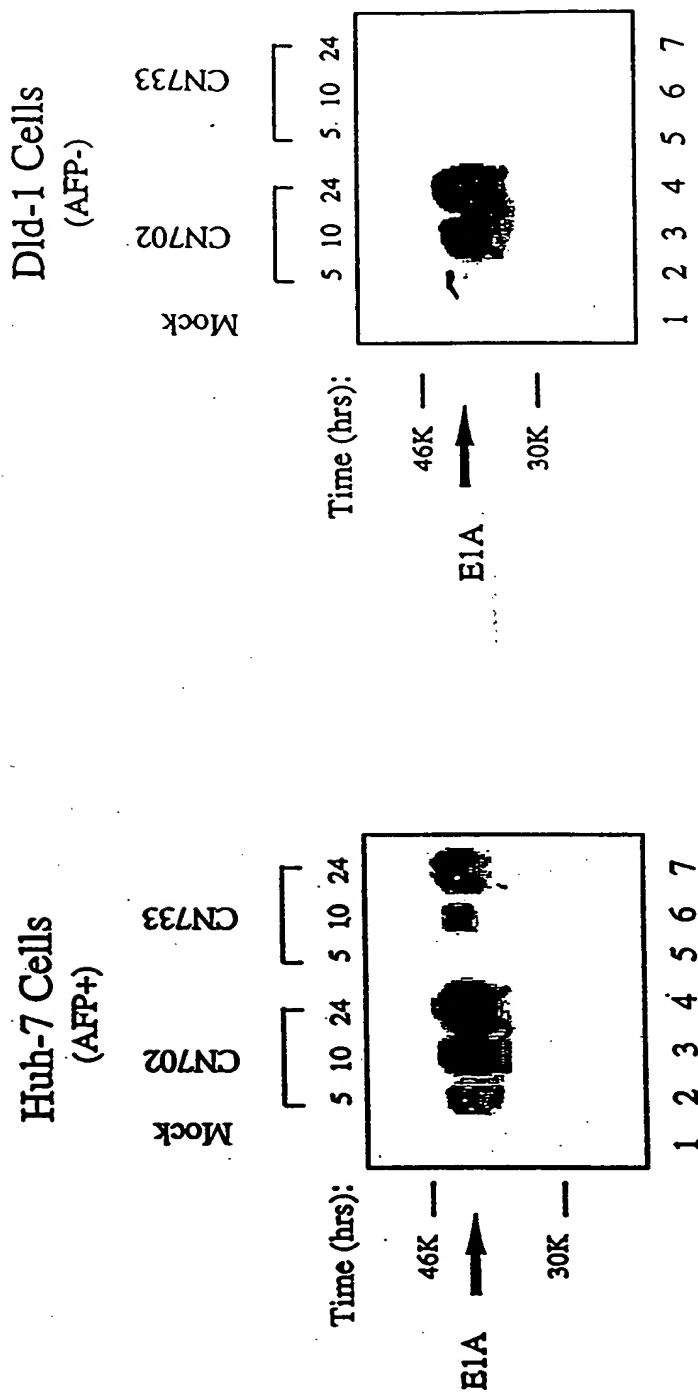


FIGURE 2B

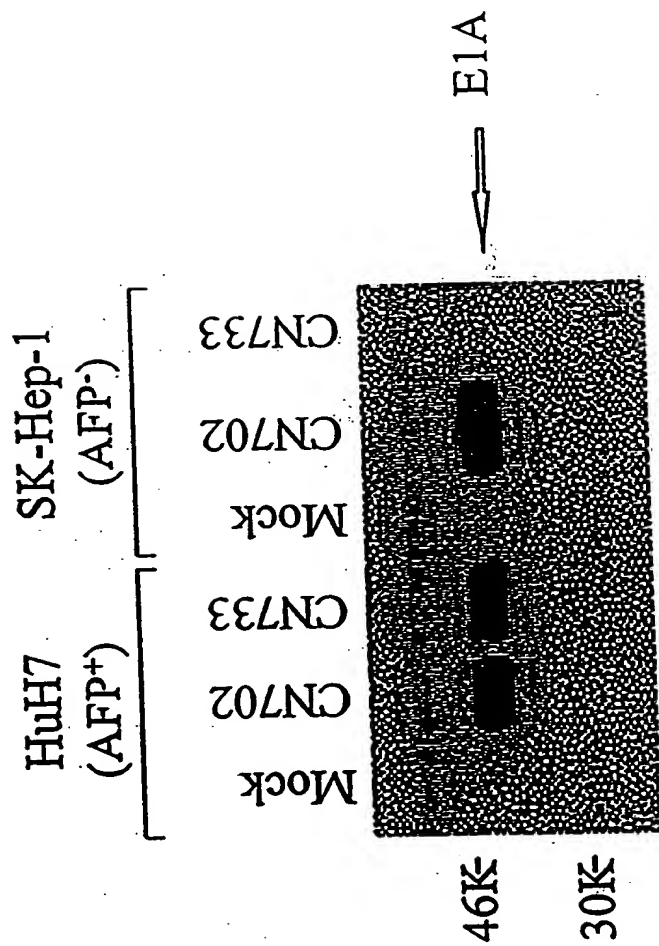
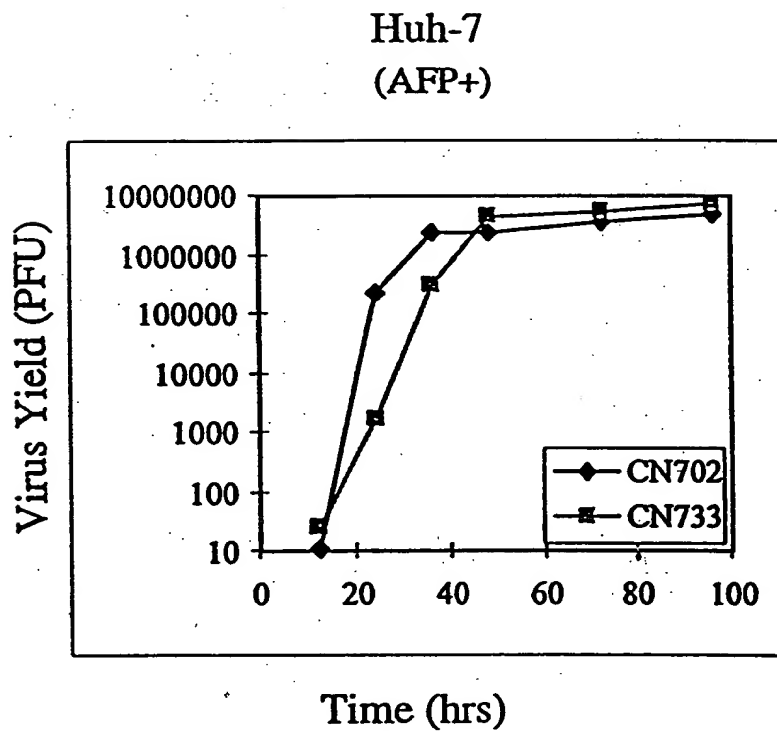


FIGURE 3A



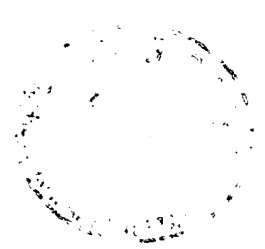


FIGURE 3B

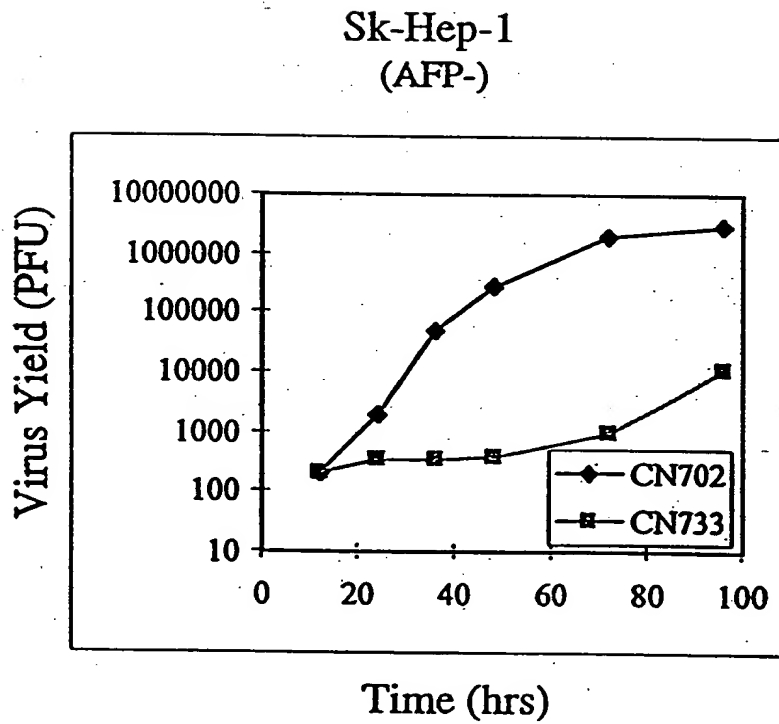


FIGURE 3C

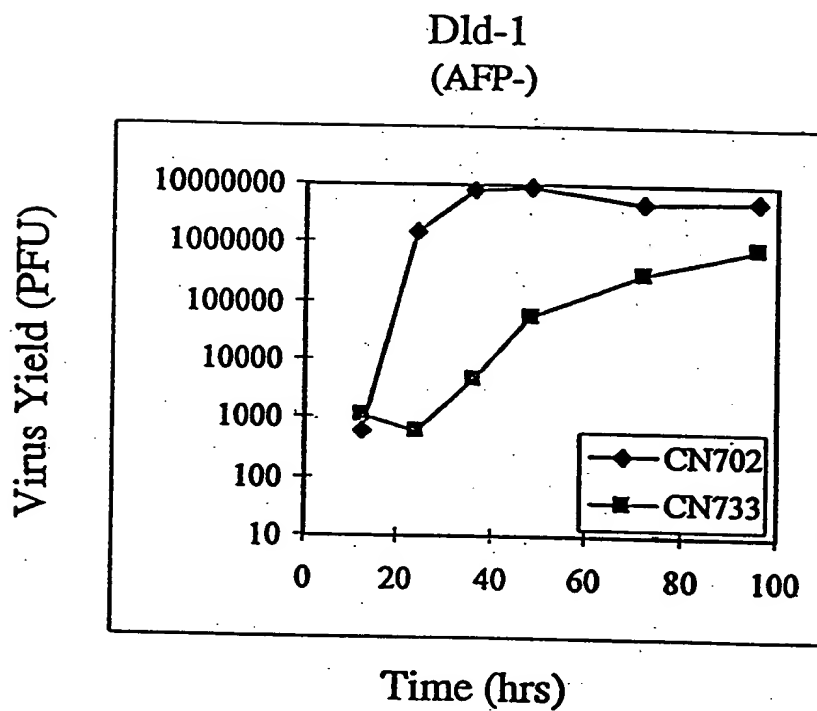
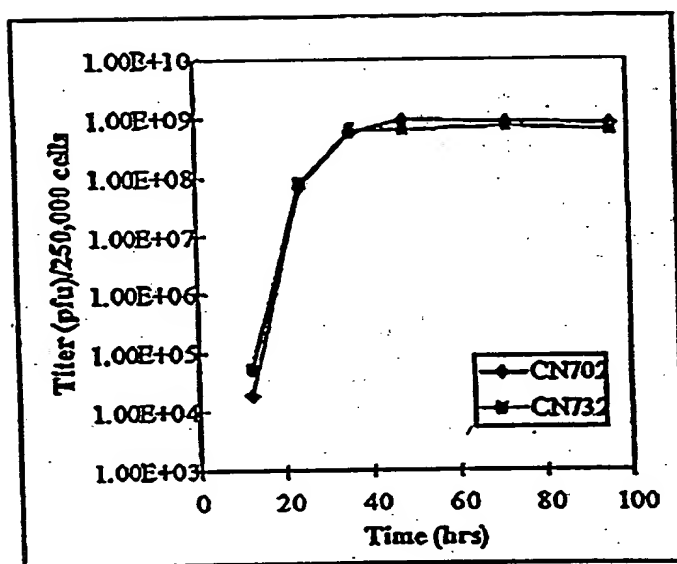


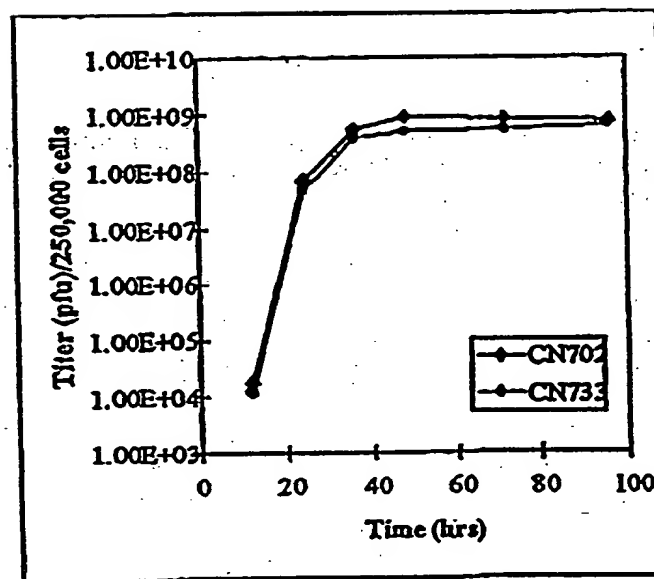


FIGURE 4A



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FIGURE 4B



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FIGURE 4C

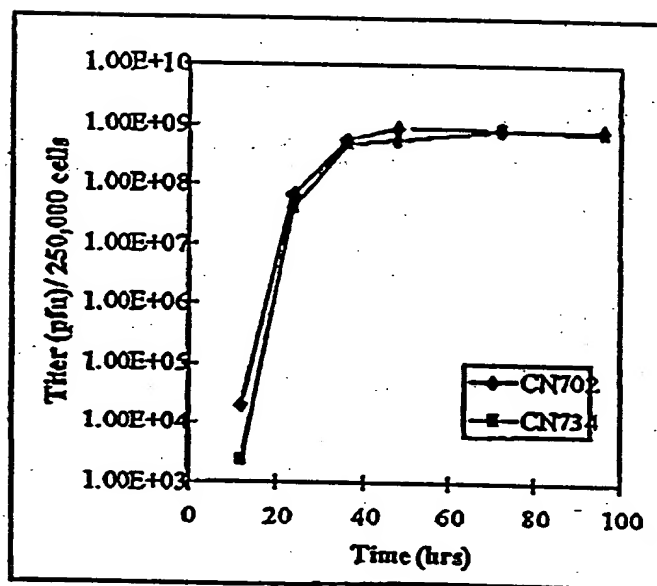
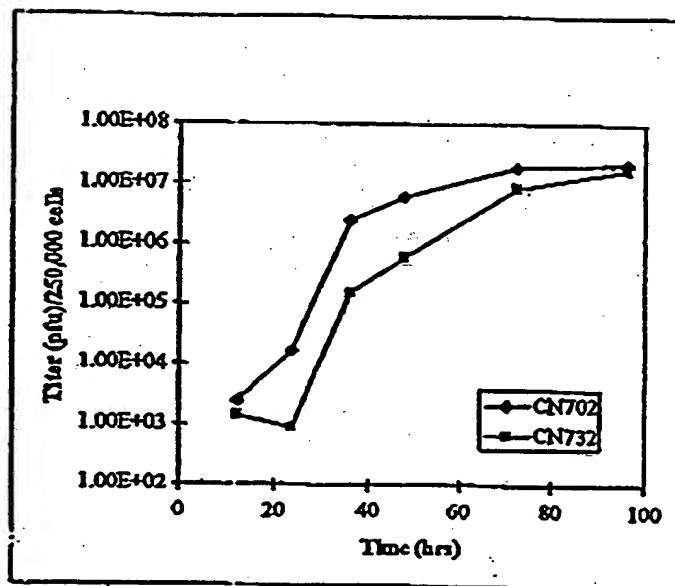
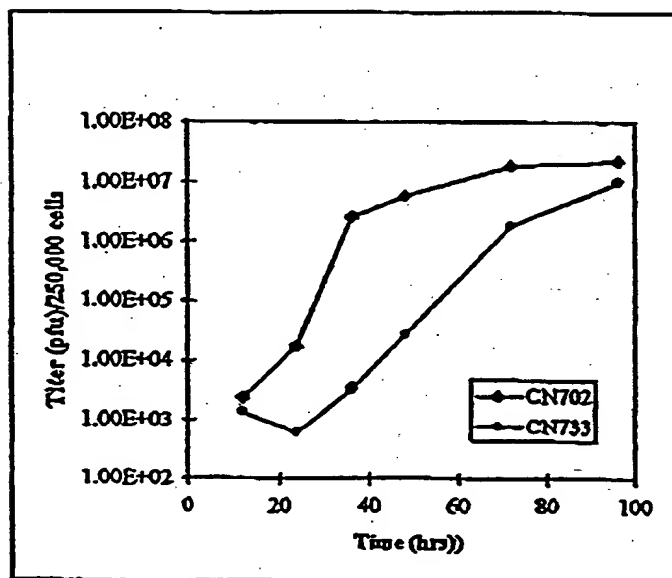


FIGURE 5A



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FIGURE 5B



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FIGURE 6A

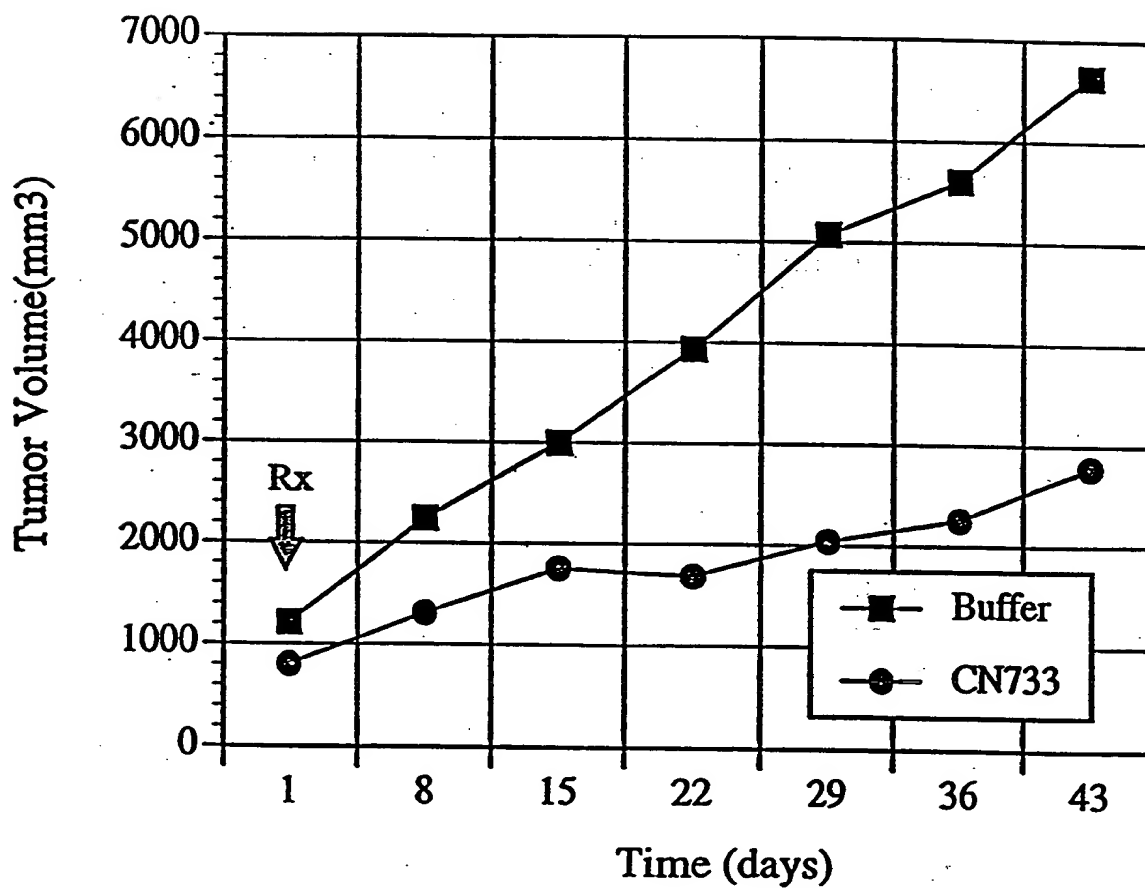
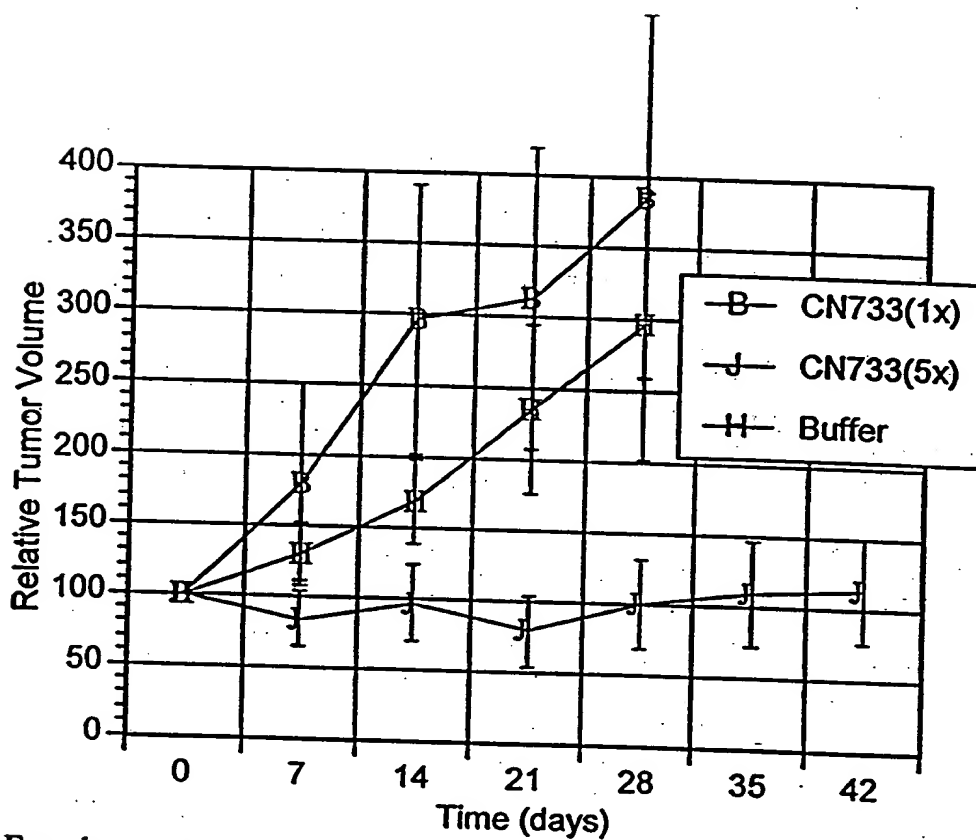


FIGURE 6B

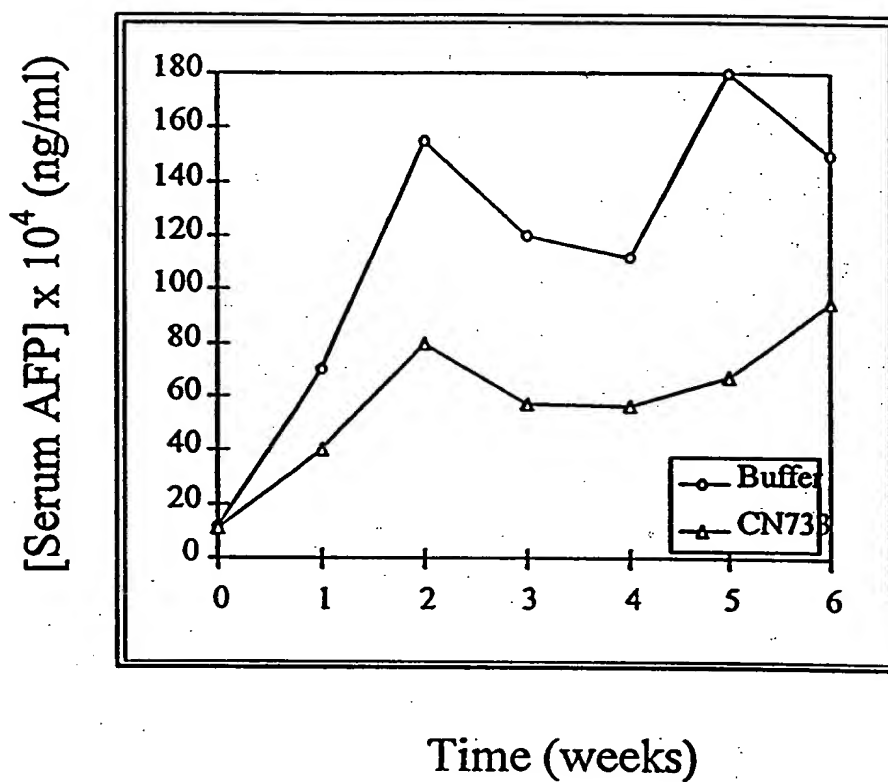


Error bars = standard error

Animals from groups treated with a single dose of CN733 and buffer were sacrificed at 28 days because of excessive tumor burden



FIGURE 7

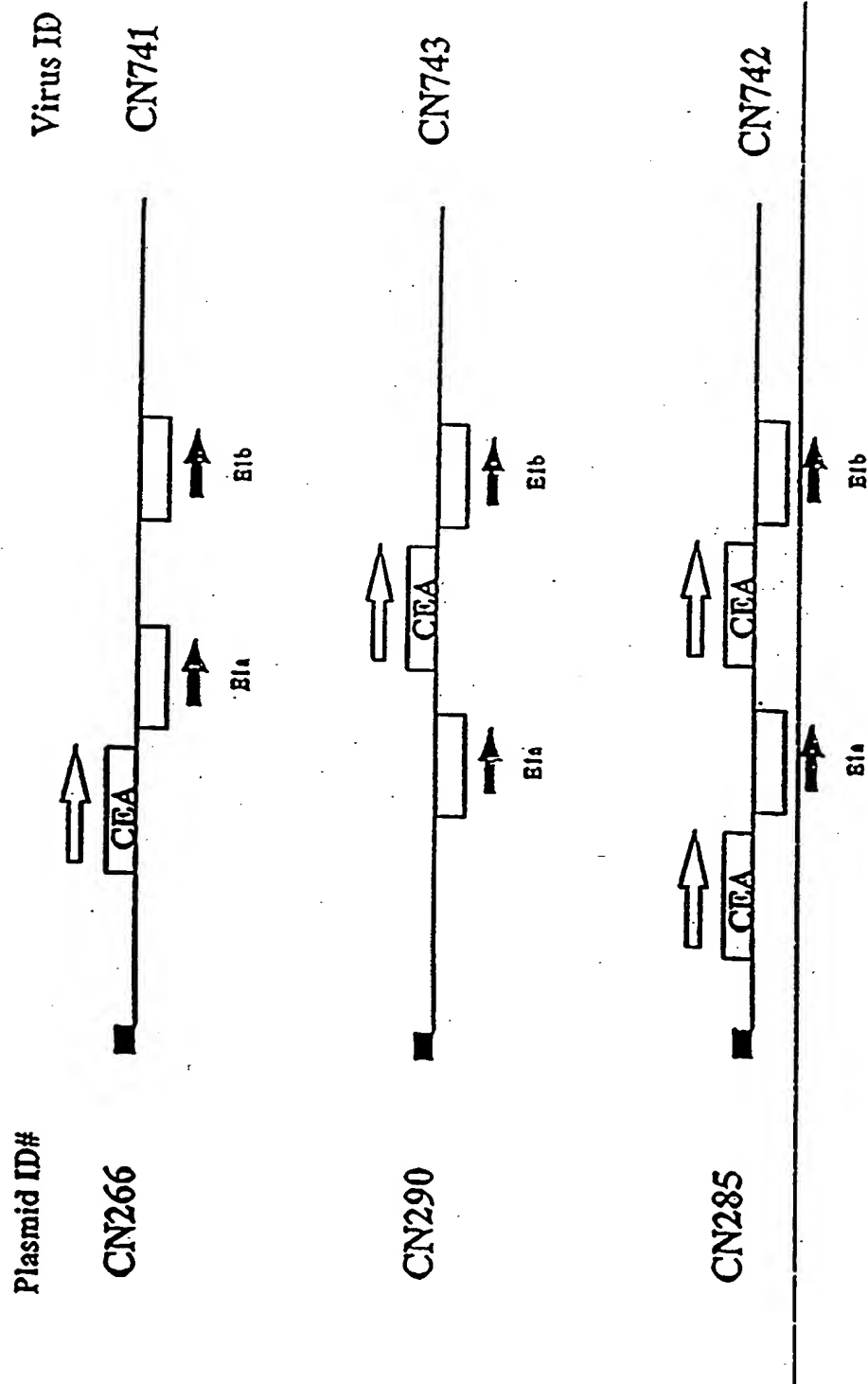




FOOTNOTES

FIGURE 8

CEA E1a and E1b Adenovirus Constructs



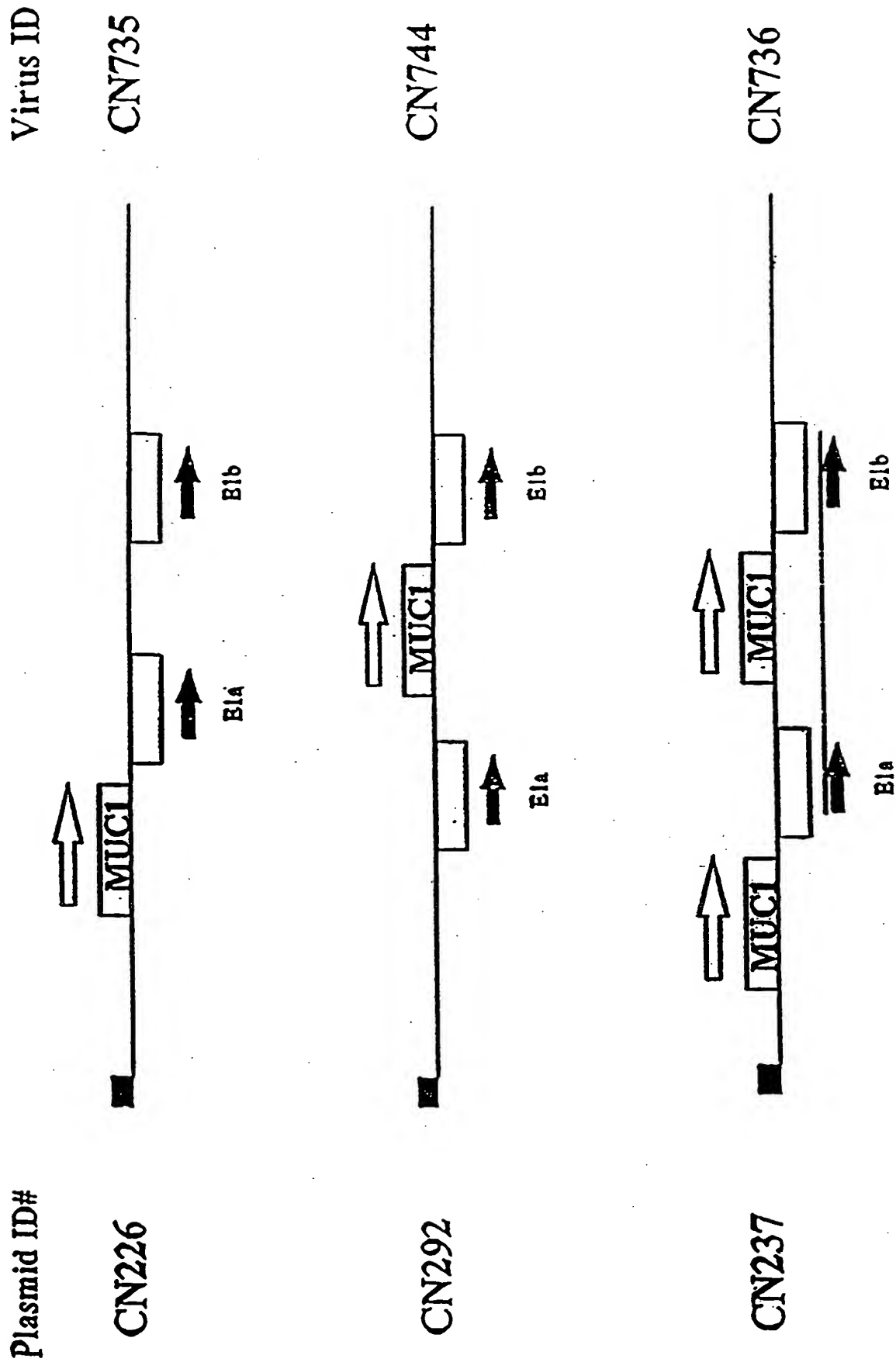


FIGURE 9



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5'-AAGCTTCCACAAGTGCATTTAGCCTCTCCAGTATTGCTGATGAATCCACAGT
TCAGGTTCAATGGCGTTCAAACTTGATCAAAAATGACCAGACTTTATATTCTTA
CACCAACATCTATCTGATTGGAGGAATGGATAATAGTCATCATGTTTAAACATCT
ACCATTCAGTTAAGAAAATATGATAGCATCTTGTCTTAGTCTTTTCTTAATA

ARE-1

GGGACATAAAGCCACAAATAAAAATATGCCTGAAGAATGGGACAGGCATJGG
GCATTGTCCATGCCTAGTAAAGTACTCCAAGAACCTATTGTATACTAGATGACA

ARE-2

CAATGTCAATGTCTGTGTACAACTGCCAACTGGGATGCAAGACACTGCCCATG

+1

CCAATCATCCTGAAAAGCAGCTATAAAAAGCAGGAAGCTACTCTGCACATT

CAAT box

TATAA box

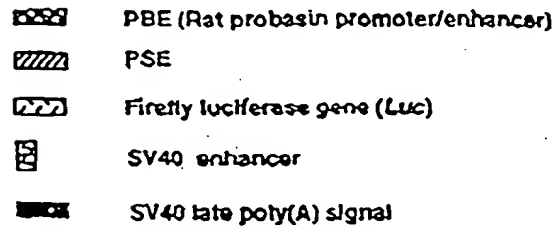
Transcription site

+26

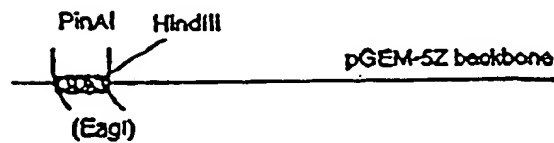
GTCAGTGAGGTCCAGATACCTACAG-3'

FIGURE 10

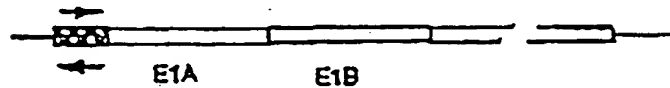
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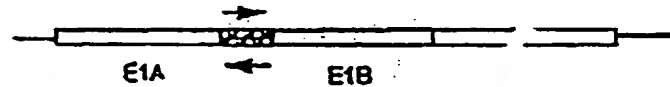
CN249
 (CN250)
 CN256
 CN271



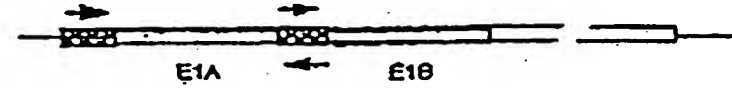
CN251
 CN253



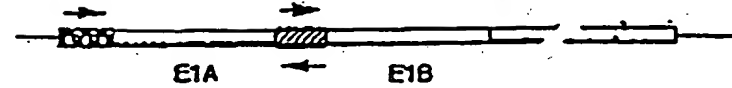
CN254 (CN275)
 CN255 (CN276)



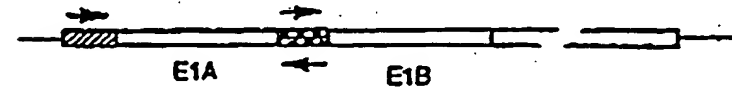
CN268
 CN269



CN257
 CN258



CN273
 CN274



CN280



CN281

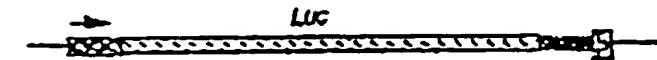


FIGURE 11

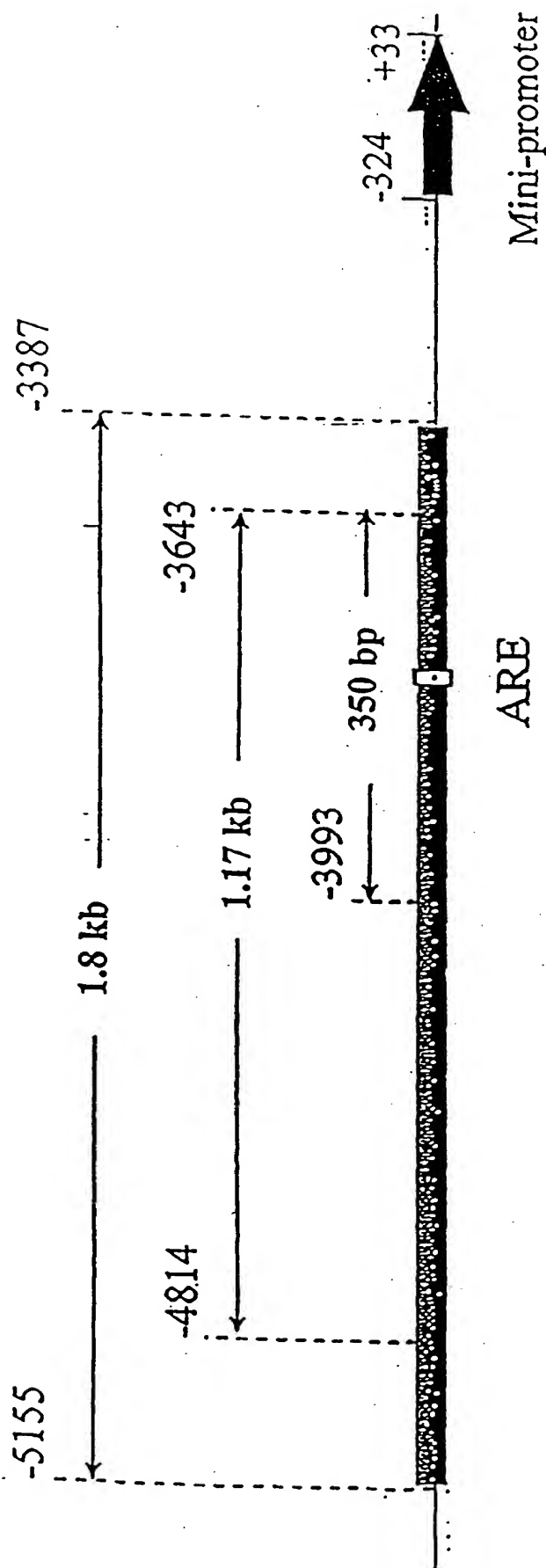
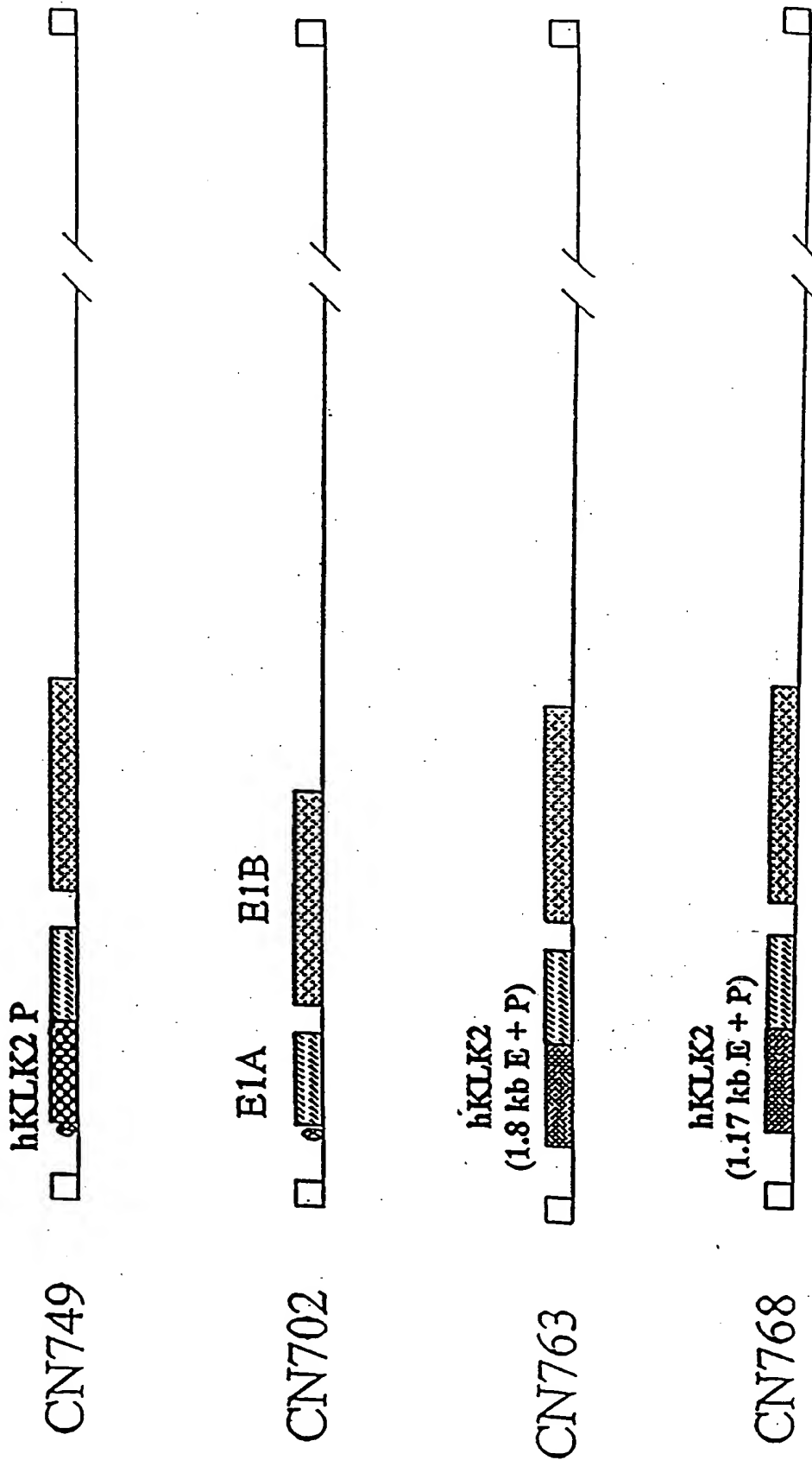


FIGURE 12

FIGURE 13



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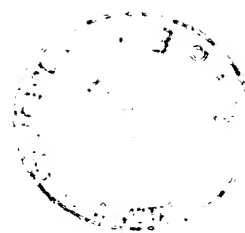


FIGURE 14A

aagcttttta gtgctttaga cagtgaagctg gtctgtctaa cccaagtgaac ctggggtcca	60
tactcagccc cagaagtga ggggtgaagct ggggtggagcc aaaccaggca agcctaccct	120
caggggtccc agtggcctga gaaccattgg acccaggacc cattacttct agggtaagga	180
aggtacaaac accagatcca accatggtct ggggggacag ctgtcaaatg cctaaaaata	240
tacctgggag aggagcaggc aaactatcac tgccccaggt tctctgaaca gaaacagagg	300
ggcaacccaa agtccaaatc caggtgagca ggtgcaccaa atgcccagag atatgacgag	360
gcaagaagtg aaggaaccac ccctgcatca aatgttttgc atgggaagga gaagggggtt	420
gctcatgttc ccaatccagg agaatgcatt tgggatctgc cttcttctca ctccctgggt	480
agcaagacta agcaaccagg actctggatt tggggaaaga cgtttatttg tggaggccag	540
tgatgacaat ccacgaggg cctaggtgaa gagggcagga aggctcgaga cactggggac	600
tgagtgaaaa ccacacccat gatctgcacc acccatggat gctccttcat tgetcacctt	660
tctgttgata tcagatggcc ccattttctg taccttcaca gaaggacaca ggctagggtc	720
tgtgcatggc cttcatcccc ggggccatgt gaggacagca ggtgggaaag atcatgggtc	780
ctcctgggtc ctgcagggcc agaacattca tcaccatac tgacctocta gatgggaatg	840
gcttccttg ggctgggcca acggggcctg ggcaggggag aaaggacgtc aggggacagg	900
gaggaagggt catcgagacc cagcctggaa ggttcttgc tctgaccatc caggatttac	960
ttcctgcat ctaccttgg tcattttccc tcagcaatga ccagctctgc ttctgatct	1020
cagcctccca ccttggaac agcaccacag tccctggccc ggctgcatcc acccaatacc	1080
ctgataaccc aggaccatt acttctaggg taaggagggt ccaggagaca gaagctgagg	1140
aaaggtctga agaagtcaca tctgtcctgg ccagagggga aaaaccatca gatgctgaac	1200
caggagaatg ttgaccacag aaagggaccg aggaccaag aaaggagtca gaccaccagg	1260
gtttgcctga gaggaaggat caaggccccg agggaaagca gggctggctg catgtgcagg	1320
acactggtgg ggcatatgtg tcttagattc tccctgaatt cagtgtccct gccatggcca	1380
gactctctac tcaggcctgg acatgctgaa ataggacaat ggcccttgctc tctctcccca	1440
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tctgtctcac acctcaggga ctgtagttac tgcacagcc atggtaggtg ctgatctcac	1560
ccagcctgtc caggcccttc cactctccac tttgtgacca tgtccaggac caccctcag	1620
atcctgagcc tgcaaatacc cccttgctgg gtgggtggat tcagtaaaca gtgagctcct	1680

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FIGURE 14B

atccagcccc	cagagccacc	tctgtcacct	tctgtctggg	catcatccca	ccttcacaag	1740
cactaaagag	catggggaga	cctggctagc	tgggtttctg	catcacaag	aaaataatcc	1800
cccagggttcg	gattcccagg	gctctgtatg	tggagctgac	agacctgagg	ccaggagata	1860
gcagaggtea	gccctagga	gggtgggtca	tccaccagg	ggacaggggt	gcaccagcct	1920
tgctactgaa	agggcctccc	caggacagcg	ccatcagccc	tgcttgagag	ctttgctaaa	1980
cagcagtcag	aggaggccat	ggcagtggct	gagctcctgc	tccaggcccc	aacagaccag	2040
accaacagca	caatgcagtc	cttccccaac	gtcacaggtc	accaaaggga	aactgagggtg	2100
ctacctaacc	ttagagccat	caggggagat	aacagcccaa	tttcccaaac	aggccagttt	2160
caatcccatg	acaatgacct	ctctgtcttc	attcttccca	aaataggacg	ctgattctcc	2220
cccaccatgg	atttctccct	tgtcccggga	gccttttctg	ccccctatga	tctgggcact	2280
cctgacacac	acctcctctc	tggtgacata	tcagggtccc	tcactgtcaa	gcagtccaga	2340
aaggacagaa	ccttgagacag	cgcccatctc	agcttcaccc	ttcctccttc	acagggttca	2400
gggcaaagaa	taaatggcag	aggccagtga	gccagagat	ggtgacaggc	agtgaccag	2460
gggcagatgc	ctggagcagg	agctggcggg	gccacaggga	gaaggtgatg	caggaaggga	2520
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cggggttcag	atggagaagg	agcaggacag	gggatcccca	ggataggagg	accccagtgt	2760
ccccaccag	gcaggtgact	gatgaatggg	catgcagggt	cctcctgggc	tgggctctcc	2820
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ttctggggag	tccatgtaaa	gccaggagct	tgtgttgcta	ggaggggtca	tggcatgtgc	2940
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gccagatgg	ggagatggat	gtcaggaaag	gctgccccat	cagggagggt	gatagcaatg	3060
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tcacaacctg	gggacactgc	ccatgaaggg	gcgcctttgc	ccagccagat	gctgctggtt	3180
ctgccccatcc	actaccctct	ctgctccagc	cactctgggt	ctttctccag	atgccctgga	3240
cagccctggc	ctgggcctgt	cccctgagag	gtgttgggag	aagctgagtc	tctggggaca	3300
ctctcatcag	agtctgaaag	gcacatcagg	aaacatccct	ggtctccagg	actaggcaat	3360

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FIGURE 14C

gaggaaaggg cccagctcc tccctttgcc actgagaggg tgcacctgg gtggccacag 3420
tgactttctgc gtctgtccca gtcacctga aaccacaaca aaacccacgc ccagacct 3480
gcaggtacaa tacatgtggg gacagtctgt acccagggga agccagttct ctcttcctag 3540
gagaccgggc ctcagggtg tgcccggggc aggcgggggc agcacgtgcc tgtccttgag 3600
aactcgggac cttaagggtc tctgtctctgt gaggcacagc aaggatcctt ctgtccagag 3660
atgaaagcag ctctgcccc tctcttgacc tcttctctct tcccaaactt caaccaacaa 3720
ataggtgttt caaatctcat catcaaactt tcatccatcc acatgagaaa gcttaaaacc 3780
caatggattg acaacatcaa gagttggaac aagtggacat ggagatgtta cttgtggaaa 3840
tttagatgtg ttcagctatc gggcaggaga atctgtgtca aattccagca tggttcagaa 3900
gaatcaaaaa gtgtcacagt ccaaagtgc aacagtgcag gggataaaac tgtggtgcat 3960
tcaaactgag ggatattttg gaacatgaga aaggaaggga ttgctgctgc acagaacatg 4020
gatgatctca cacatagagt tgaaagaaag gagtcaatcg cagaatagaa aatgatcact 4080
aattccacct ctataaagtt tccaagagga aaacccaatt ctgctgctag agatcagaat 4140
ggaggtgacc tgtgccttgc aatggctgtg agggtcacgg gagtgtcact tagtgcaggc 4200
aatgtgccgt atcttaactt gggcagggtt ttcagtgca cataggaatg cagacattac 4260
tgctgtgttc attttacttc accggaaaag aagaataaaa tcagccgggc gcggtggctc 4320
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cttggaacca ggaagcagag gttgcagtga gccagattg tgccactgca ctccagcttg 4560
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agaaagaaa gtataaaatc tctttgggtt aacaaaaaaa gatccacaaa acaaacacca 4680
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aatcaatca ttgcctttac tacatagaca gattagctag aaaaaaatta caactagcag 4980
aacagaagca atttggcctt cctaaaattc cacatcatat catcatgatg gagacagtgc 5040
agacgccaat gacaataaaa agagggacct ccgtcacccg gtaaacatgt ccacacagct 5100

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FIGURE 14D

ccagcaagca cccgtcttcc cagtgaatca ctgtaacctc cccctttaatc agccccaggc 5160
aaggctgcct gcgatggcca cacaggetcc aaccctgtgg cctcaacctc ccgcagaggc 5220
tctcctttgg ccaccccatg gggagagcat gaggacaggg cagagccctc tgatgcccac 5280
acatggcagg agctgacgcc agagccatgg gggctggaga gcagagctgc tggggtcaga 5340
gcttcttgag gacacccagg cctaaggga ggcagctccc tggatggggg caaccaggct 5400
ccgggctcca acctcagagc ccgcatggga ggagccagca ctctaggcct ttcttagggg 5460
gactctgagg ggacctgac acgacaggat cgctgaatgc acccgagatg aaggggccac 5520
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ggcatggctg cgactgaccc agggcactcc cctgcatgca tcagcctcgg taagtacat 5640
gaccaagccc aggaccaatg tggaaggaag gaaacagcat cccctttagt gatggaaccc 5700
aaggctcagt caaagagagg ccatgagcag ttaggaaggg tggccaacc tacagcaca 5760
accatcatct atcataagta gaagccctgc tccatgaccc ctgcatttaa ataaacgttt 5820
gttaaattag tcaaattccc tcccatgag agctcacctg tgtgtaggcc catcacacac 5880
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tgtgattcca aacttaaact actgtgccta caaatagga aataacccta ctttttctac 6480
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gatcctagag ctggcccat gattgacagg aaggcaggac ttggcctcca ttctgaagac 6720
taggggtgtc aagagagctg ggcacccac agagctgcac aagatgacgc ggacagaggg 6780

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FIGURE 14E

tgacacaggg	ctcagggcctt	cagacgggtc	gggaggctca	gctgagagtt	cagggacaga	6840
cctgaggagc	ctcagtggga	aaagaagcac	tgaagtggga	agttctggaa	tgttctggac	6900
aagcctgagt	gctctaagga	aatgctccca	ccccgatgta	gcctgcagca	ctggacggtc	6960
tgtgtacctc	cccgtgccc	atcctctcac	agccccgcc	tctagggaca	caactcctgc	7020
cctaacatgc	atctttcctg	tctcattcca	cacaaaaggg	cctctgggggt	ccctgttctg	7080
cattgcaagg	agtggaggtc	acgttcccac	agaccacca	gcaacagggt	cctatggagg	7140
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ttggcctgga	ggccactggt	cccctctgtc	cctgagggga	atctgcaccc	tggaggctgc	7260
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acagatcctg	agtgagagaa	ccttttaggga	cacaggtgca	cggccatgtc	cccagtgtcc	7440
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ccccaatgac	gtgaccctg	gggtggctcc	aggtctccag	tccatgccac	caaaatctcc	7560
agattgaggg	tcctcccttg	agtcctgat	gcctgtccag	gagctgtccc	ctgagcaaat	7620
ctagagtgca	gagggctggg	attgtggcag	taaaagcagc	cacatttgct	tcaggaagga	7680
aagggaggac	atgagctcca	ggaagggcga	tggcgtctc	tagtgggcgc	ctcctgttaa	7740
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tggagaggac	tgaggtgcaa	agagggggct	gaagtagggg	agtggtcggg	agagatggga	7860
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ctcagcattg	acatttgagg	tggctgtgct	agtgggggtc	tgtaatgtgt	aggggtgtca	7980
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accaacaatg	tctccagact	ttccaaatgt	cccctggaga	gcaaaattgc	ttctggcaga	8100
atcactgac	tacgtcagtc	tctaaaagtg	actcatcagc	gaaatccttc	acctcttggg	8160
agaagaatca	caagtgtgag	aggggtagaa	actgcagact	tcaaaatctt	tccaaaagag	8220
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atgccacatg	gctgcctgtg	cctcacagca	ggagcagagt	gggttttcca	agggcctgta	8340
accacaactg	gaatgacact	cactgggtta	cattacaaag	tggaatgtgg	ggaattctgt	8400
agactttggg	aagggaaatg	tatgacgtga	gccacagcc	taaggcagtg	gacagtccac	8460
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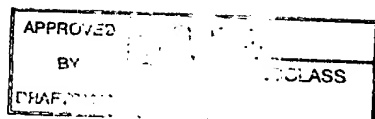


FIGURE 14F

gaaaacatgt tttattaaga ggaaaaatct aggctagaag tgctttatgc tcttttttct 8580
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gtaaagtta tcaactgactg gatagtgttg gtgtctcact cccaaccct gtgtggtgac 8700
agtgcctgc tccccagcc ctgggcctc tctgattcct gagagctttg ggtgctcctt 8760
cattaggagg aagagaggaa ggggtgtttt aatattctca ccattcaccc atgcacctct 8820
tagacactgg gaagaatcag ttgcccactc ttggatttga tctctgaatt aatgacctct 8880
atttctgtcc cttgtccatt tcaacaatgt gacaggccta agaggtgcct tctccatgtg 8940
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taacagtaaa ctagaataat aaaacatgca tcacagttgc tggtaaagct aaatcagata 9300
tttttttctt agaaaaagca ttccatgtgt gttgcagtga tgacaggagt gcccttcagt 9360
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cctggtagtg gtgaggagcc ttgggaccct caggattact ccccttaagc atagtggga 10020
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agacctgc accaatgaga ccatgctgaa gcctcagaga gagagatgga gctttgacca 10140
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FIGURE 14G

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acaccagtgt ctaagcccct gatgagaaca ggggtggtctc tcccatatgc ccataccagg 10260
cctgtgaaca gaatcctcct tctgcagtga caatgtctga gaggacgaca tgtttccag 10320
cctaacgtgc agccatgccc atctaccacac tgcctactgc aggacagcac caaccaggga 10380
gctgggaagc tgggagaaga catggaatac ccatggcttc tcaccttctt ccagtccagt 10440
gggcaccatt tatgcctagg acaccacact gccggcccca ggctcttaag agttagggtca 10500
cctaggtgcc tctgggaggg cgaggcagga gaattgcttg aaccggggag gcagaggttg 10560
cagtgaagcg agatcacacc actgcactcc agcctgggtg acagaatgag actctgtctc 10620
aaaaaaaaag agaaagatag catcagtggc taccaagggc taggggcagg ggaaggtgga 10680
gagttaatga ttaatagtat gaagtttcta tgtgagatga tgaaaatgtt ctggaaaaaa 10740
aaatatagtg gtgaggatgt agaataattg gaatataatt aacggcattt aattgtacac 10800
ttaacatgat taatgtggca tattttatct tatgtatttg actacatcca agaaacactg 10860
ggagagggaa agcccacat gtaaaatata cccaccctaa tcagatagtc ctcattgtac 10920
ccaggtacag gccctcatg acctgcacag gaataactaa ggatttaagg acatgaggct 10980
tcccagccaa ctgcaggtgc acaacataaa tgtatctgca aacagactga gagtaaagct 11040
gggggcacaa acctcagcac tgccaggaca cacacccttc tctgtgattc tgactttatc 11100
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caccagagaa tcaggtacag agaggaagac ggggctcgag gagctgatgg atgacacaga 11340
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tgaagccaca gatgggagaa gatggttcag gaagaaaaat ccaggaatgg gcaggagagg 11700
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tcagcaggtg aggccaggtc ccatgaacag agaagcagct cccacctccc ctgatgcag 11820
gacacacaga gtgtgtggtg ctgtgcccc agagtcgggc tctctgttc tggccccag 11880
ggagtgaaga gtgaggttga cttgtccctg ctctctctg ctacccaac attcaccttc 11940
  
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FIGURE 14H

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caaattgtaa accccaatgt tggagggtgg gccttgtag aagtgattgg ataatgcggg 12060
tggattttct gctttgatgc tgtttctgtg atagagatct cacatgatct ggttggttaa 12120
aagtgtgtag cacctctccc ctctctctct ctctctctta ctcatgctct gccatgtaag 12180
acgttcctgt ttccccctca ccgtccagaa tgattgtaag tttcttgagg cctccccagg 12240
agcagaagcc actatgcttc ctgtacaact gcagaatgat gagcgaatta aacctctttt 12300
ctttataaat taccagctct cagggtatttc tttatagcaa tgcgaggaca gactaataca 12360
atcttctact ccagatccc cgcacacgct tagccccaga catcactgcc cctgggagca 12420
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tctagagatc agtggtgagt aaaacagcct ggtctggggc cgctgctgtc cccacttccc 12660
tcctgtccac cagagggcgg cagagttcct cccacctgg agcctcccca ggggctgctg 12720
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FIGURE 14I

caacagaccc	ttctgatctc	tcccacatac	ctgctctggt	cctttctggg	tcctatgagg	13680
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cccctggagc	cttccccaa	gacagcagag	cccagagtca	cccacctccc	tecaccacag	13920
tcctctcttt	ccaggacaca	caagacacct	ccccctccac	atgcaggatc	tggggactcc	13980
tgagacctct	gggcctgggt	ctccatccct	gggtcagtg	cggggttggt	ggtactggag	14040
acagaggggt	ggtccctccc	cagccaccac	ccagtgagec	tttttctagc	cccagagacc	14100
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gagacccggg	accctgctgg	gtttctctgt	cacaaaggaa	aataatcccc	ctggtgtgac	14220
agacccaagg	acagaacaca	gcagaggtca	gcactgggga	agacagggtg	tcctcccagg	14280
ggatgggggt	ccatccacct	tgccgaaaag	atttgtctga	ggaactgaaa	atagaaggga	14340
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FIGURE 15A

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atctgtgaca atattcacag tgtaatgcca tccagggaaac tcaactgagc cttgatgtcc 120
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gatctgccca ccttggcctc ccaaagtgtt gggatgacag gcgtgagcca ccgcgcctgg 420
ccgatatcca gagatttttt ggggggctcc atcacacaga catgttgact gtcttcattg 480
ttgactttta gtatccagcc cctctagaaa tctagctgat atagtgtggc tcaaaaactt 540
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tggaaaagaa aaagaaagaa aggaaaaaaa aaaaaaaaaa gagatgacct ctcaggctct 720
gaggggaaac gctgaggtc tttgagcaag gtcagtcctc tgttgacag tctccctcac 780
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cctgagatta ggaatcctca atcttatact gggacaactt gcaaacctgc tcagccttg 1620
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FIGURE 15B

catattgtat cgattgtcct tgacagtaaa caaatctggt gtaagagaca ttatctttat 1740
 tatctaggac agtaagcaag cctggatctg agagagatat catcttgcaa ggatgcctgc 1800
 ttacaaaca tccttgaaac aacaatccag aaaaaaaaaag gtgttgctgt ctttgctcag 1860
 aagacacaca gatacgtgac agaaccatgg agaattgcct cccaacgctg ttcagccaga 1920
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 accagttagg atggaggatc agattggagt tgggttagag atggggtaaa attgtgctcc 3300
 ggatgagttt gggattgaca ctgtggaggt gggttgggat ggcattggctt tgggatggaa 3360

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BY	CHAS
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FIGURE 15C

atagatttgt tttgatgttg gctcagacat ccttggggat tgaactggg atgaagctgg 3420
gtttgatttt ggaggtagaa gacgtggaag tagctgtcag atttgacagt ggccatgagt 3480
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tggttggcct tgaactcctg gcttcaagtg atcctcctac cttggcctcg gaaagtgttg 4980
ggattacagg cgtgagccac catgactgac ctgtcgttaa tcttgaggta cataaacctg 5040
gctcctaaag gctaaaggct aaatatttgt tggagaaggg gcattggatt ttgcatgagg 5100

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BY	CLASS
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Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
Inventor: Daniel R. HENDERSON and Eric R. SCHUUP
Application No.: 09/732,169
Docket No.: 348022000201

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FIGURE 15D

atgattctga cctgggaggg caggtcagca ggcatctctg ttgcacagat agagtgtaca 5160
ggtctggaga acaaggagtg gggggttatt ggaattccac attgtttgct gcacgttgga 5220
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BY	
DATE	

FIGURE 16A

gaattcagaa ataggggaag gttgaggaag gacactgaac tcaaagggga tacagtgatt 60
ggtttatttg tcttctcttc acaacattgg tgctggagga attcccaccc tgagggttatg 120
aagatgtctg aacacccaac acatagcact ggagatatga gctcgacaag agtttctcag 180
ccacagagat tcacagccta gggcaggagg acactgtacg ccaggcagaa tgacatggga 240
attgcgctca cgattggcctt gaagaagcaa ggactgtggg aggtgggctt tgtagtaaca 300
agagggcagg gtgaactctg attcccatgg gggaatgtga tggtcctgtt acaaattttt 360
caagctggca ggggaataaaa cccattacgg tgaggacctg tggagggcgg ctgccccaac 420
tgataaagga aatagccagg tgggggcctt tcccattgta ggggggacat atctggcaat 480
agaagccttt gagacccttt aggggtacaag tactgaggca gcaaataaaa tgaaatctta 540
ttttcaact ttatactgca tgggtgtgaa gatatatattg tttctgtaca gggggtgagg 600
gaaaggaggg gaggaggaaa gttcctgcag gtctggtttg gtcttgtgat ccaggggggtc 660
ttggaactat ttaaattaaa ttaaattaaa acaagcgact gttttaaatt aaattaaatt 720
aaattaaatt ttactttatt ttatcttaag ttctgggcta catgtgcagg acgtgcagct 780
ttgttacata ggtaaactg tgccatggtg gtttgcgtga cctatcaacc catcacctag 840
gtattaagcc cagcatgcat tagctgtttt tctgacgct ctccctctcc ctgactccca 900
caacaggccc cagtgtgtgt tgttcccctc cctgtgtcca tgtgttctca ttgttcagct 960
cccacttata agtgagaaca tgtggtgttt ggttttctgt ttctgtgtta gtttgcagag 1020
gataatggct tccacctcca tccatgttcc tgcaaaggac gtgatcttat tcttttttat 1080
ggttgcatag aaattgtttt tacaaatcca attgatattg tatttaatta caagttaatc 1140
taattagcat actagaagag attacagaag atattaggta cattgaatga ggaaatatat 1200
aaaataggac gaaggtgaaa tattaggtag gaaaagtata atagttgaaa gaagtaaaaa 1260
aaaatatgca tgagtagcag aatgtaaaag aggtgaagaa cgtaatagtg actttttaga 1320
ccagattgaa ggacagagac agaaaaattt taaggaattg ctaaaccatg tgagtgttag 1380
aagtacagtc aataacatta aagcctcagg aggagaaaag aataggaaag gaggaaatat 1440
gtgaataaat agtagagaca tgtttgatgg attttaaaat atttgaaaga cctcacatca 1500
aaggattcat accgtgccat tgaagaggaa gatggaaaag ccaagaagcc agatgaaagt 1560
tagaaatatt attggcaaag cttaaattgtt aaaagtccta gagagaaagg atggcagaaa 1620
tattggcggg aaagaatgca gaacctagaa tataaattca tcccacaggt ttggtagtgt 1680

09732169.100201

APPROVED	BY	DATE	CLASS
DRAFTSMAN			

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS

Inventor: Daniel R. HENDERSON and Eric R. SCHUUR

Publication No.: 09/732,169

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FIGURE 16B

gcagctgtag ccttttctag ataatacact attgtcatac atcgcttaag cgagtgtaaa 1740
atggtctect cactttatatt atttatatat ttatttagtt ttgagatgga gcctcgctct 1800
gtctectagg ctggagtgc aatagtgcgat accactcact gcaacctctg cctcctctgt 1860
tcaagtgatt ttcttacctc agcctcccga gtagctggga ttacaggtgc gtgccaccac 1920
acccggctaa tttttgtatt tttttagtag acgggggttt gccatgttgg ccaggtgtgt 1980
cttgaactcc tgacatcagg tgatccacct gccttggcct cctaaagtgc tgggattaca 2040
ggcatgagcc accgtgccc accactttat ttatttttta tttttatttt taaatttcag 2100
cttctatttg aaatacaggg ggcacatata taggattgtt acatgggtat attgaactca 2160
ggtagtgatc atactaccca acaggtaggt tttcaaccca ctccccctct tttctcccc 2220
attctagtag tgtgcagtgt ctattgttct catgtttatg tctatgtgtg ctccaggttt 2280
agctcccacc tgtaagttag aacgtgtggt atttgatttt ctgtccctgt gtttaattcac 2340
ttaggattat ggcttccagc tccattcata ttgctgtaaa ggatatgatt catttttcat 2400
ggccatgcag tattccatat tgcgtataga tcacattttc tttctttttt ttttttgaga 2460
cggagtcttg ctttgctgcc taggctggag tgcagtagca cgatctggc tcaactgcaag 2520
cttcacctcc ggggttccag tcattcttct gtctcagctt cccaagtagc tgggactaca 2580
ggcgcccgcc accaagtccg gctaattttt ttgtgtgttt ttagtagaga tgggggtttc 2640
actgtgttag ccaggatggt cttgatctcc tgacctgtg gtccacctgc ctgggtctcc 2700
caaagtgtg ggattacagg ggtgagccac tgcgcccggc ccatatatac cacattttct 2760
ttaaccaatc caccattgat gggcaactag gtagattcca tggattccac agttttgcta 2820
ttgtgtgcag tgtggcagta gacatatgaa tgaatgtgtc tttttggtat aatgatttgc 2880
attccttttg gtatacagtc attaatagga gtgctgggtt gaacggtggc tctgtttaaa 2940
attctttgag aattttccaa actgtttgcc atagagagca aactaattta catttccacg 3000
aacagtatat aagcattccc tttctccac agctttgtca tcatggtttt ttttttctt 3060
tattttaaaa aagaatatgt tgttgttttc ccagggtaca tgtgcaggat gtgcaggttt 3120
gttacatagg tagtaaacgt gagccatggt ggtttgctgc acctgtcaac ccattacctg 3180
ggtatgaagc cctgcctgca ttagctcttt tccctaagtc tctcactact gccccacct 3240
caccctgaca gggcaaacag acaacctaca gaatgggagg aaatttttgc aatctattca 3300
tctgacaaag gtcaagaata tccagaatct acaaggaact taagcaaatt tttacttttt 3360

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APPROVED	O.G. 11
BY	CLASS
DEPT. MAN	DATE

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
Inventor: Daniel R. HENDERSON and Eric R. SCHULZ
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FIGURE 16C

aataatagcc actctgactg gcgtgaaatg gtatctcatt gtggttttca tttgaatttc 3420
tctgatgac agtgacgatg agcatttttt catatttggt ggctgcttgt acgtcttttg 3480
agaagtgtct cttcatgcct tttggccact ttaatgggat tattttttgc tttttagttt 3540
aagttcctta tagattctgg atattagact tcttattgga tgcatagttt gtgaatactc 3600
tcttcattc tgtaggttgt ctgtttactc tattgatggc ttcttttgct gtgccgaagc 3660
atcttagttt aattagaaac cacctgccaa tttttgtttt tgttgcaatt gcttttgggg 3720
acttagtcat aaactctttg ccaaggtctg ggtcaagaag agtatttctt aggttttctt 3780
ctagaatttt gaaagtctga atgtaaacad ttgcattttt aatgcatctt gagttagttt 3840
ttgtatatgt gaaaggtcta ctctcatttt ctttcctctt ttctttcttt ctttcttttc 3900
tttctttctt tctttctttc tttctttctt tctttcttcc tttctttttg tcttcttttc 3960
tttctttctt tcttctttct tctctctttc tttttttttt ttgatggagt attgctctgt 4020
tgcccaggct gcagtgcagc ggcacgatct cggctcactg caacctctgc ctcttggtt 4080
caactgattc tctgcatca gccttccaag tagctgggat tataggcgcc cgccaccacg 4140
cccgactaat ttttgattt ttagtagaga cggggttggt ccatgttggc caggctggtt 4200
tgaaactcct gacctcaaac gatctgctg ccttggctc ccaaagtgt gggattacag 4260
gtgtgagcca ctgtgccag ccaagaatgt cattttctaa gaggtccaag aacctcaaga 4320
tattttggga ccttgagaag agaggaattc atacaggat tacaagcaca gcctaattggc 4380
aaatctttgg catggcttgg cttcaagact ttaggtctt aaaagtcgaa tccaaaaatt 4440
tttataaaag ctccagctaa gctaccttaa aaggggcctg tatggctgat cactcttctt 4500
gctatacttt acacaaataa acaggccaaa tataatgagg ccaaaattta tttgcaaatt 4560
aaattggtcc tgctatgatt tactcttggg aagaacaggg aaaatagaga aaaatttaga 4620
ttgcatctga ctttttttcc tgaattttta tatgtgccta caatttgagc taaatcctga 4680
attattttct gggtgcaaaa actctctaaa gaagaacttg gttttcattg tcttcgtgac 4740
acatttatct ggctctttac tagaacagct ttcttgtttt tgggtgttca gcttggtgac 4800
cttacagttc tactcttcaa attattgta tgtgtatctc atagttttcc ttcttttgag 4860
aaaactgaag ccatgggtatt ctgaggacta gagatgactc aacagagctg gtgaatctcc 4920
tcatatgcaa tccactgggc tcgatctgct tcaaattgct gatgactgc tgctaaagct 4980
atacatttaa aacctcact aaaggatcag ggaccatcat ggaagaggag gaaacatgaa 5040
attgtaagag ccagattcgg ggggtagagt gtggaggta gagcaactcc acctgaata 5100

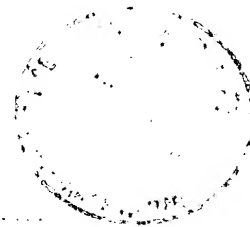
09732169-100201

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
 Inventor: Daniel R. HENDERSON and Eric R. SCHUIJER
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FIGURE 16D



agaaggtaaa gcaacctatc ctgaaagcta acctgccatg gtggcttctg attaacctct 5160
 gttctaggaa gactgacagt ttgggtctgt gtcattgccc aaatctcatg ttaaattgta 5220
 atccccagtg ttcggagggtg ggacttggtg gtaggtgatt cggtcatggg agtagatttt 5280
 cttcttttctg gtgttacagt gatagtgagt gagttctcgt gagatctggt catttaaaag 5340
 tgtgtggccc ctccccctcc tctcttggtc ctccactgc catgtaagat acctgctcct 5400
 gctttgcctt ctaccataag taaaagcccc ctgaggcctc ccagaagca gatgccacca 5460
 tgcttctgt acagcctgca gaaccatcag ccaattaaac ctcttttctg tataaattac 5520
 cagtcttgag tatctcttta cagcagtgtg agaacggact aatacaaggg tctccaaaat 5580
 tccaagttta tgtattcttt cttgccaaat agcaggtatt taccataaat cctgtcctta 5640
 ggtcaaacia ccttgatggc atcgtacttc aattgtctta cacattcctt ctgaatgact 5700
 cctccccat ggcatataag ccctgggtct tgggggataa tggcagaggg gtccaccatc 5760
 ttgtctggct gccacotgag acacggacat ggcttctgtt ggtaagtctc tattaaatgt 5820
 ttctttctaa gaaactggat ttgtcagctt gtttctttgg cctctcagct tctcagact 5880
 ttggggtagg ttgcacaacc ctgcccacca cgaaacaaat gtttaatatg ataaatatgg 5940
 atagatataa tccacataaa taaaagctct tggagggccc tcaataattg ttaagagtgt 6000
 aaatgtgtcc aaagatggaa aatgtttgag aactactgtc ccagagattt tctgagttc 6060
 tagagtgtgg gaatatagaa cctggagctt ggcttcttca gcctagaatc aggagtatgg 6120
 ggctgaagtc tgaagcttgg cttcagcagt ttgggggttg cttccggagc acatatttga 6180
 catgttgca ctgtgatttg gggtttggtt tttgctctga atcctaattg ctgtccttga 6240
 ggcatctaga atctgaaatc tgtggtcaga attctattat cttgagtagg acatctccag 6300
 tcttggttct gccttctagg gctggagtct gtagtcagt accegggtctg gcatttcaac 6360
 ttcatatata gtgggctatc ttttggtcca tgtttcaacc aaacaaccga ataaaccatt 6420
 agaacctttc cccacttccc tagctgcaat gttaaacctt ggatttctgt ttaataggtt 6480
 catatgaata atttcagcct gatccaactt tacattcctt ctaccgttat tctacacca 6540
 ccttaaaaat gcattcccaa tatattcctt ggattctacc tatatatggg aatcctgggt 6600
 ttgccagttt ctagtgcatt aacatacctg atttacattc ttttacttta aagtggaaat 6660
 aagagtcctt ctgcagagtt caggagttct caagatggcc ctacttctg acatcaattg 6720
 agatttcaag ggagtcgcca agatcatcct cagggttcagt gattgctggg agccctcata 6780

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APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIGURE 16E



taactcaatg aaagctgtta tgctcatggc tatggtttat tacagcaaaa gaatagagat 6840
 gaaaatctag caagggaaga gttgcatggg gcaaagacaa ggagagctcc aagtgcagag 6900
 attcctgttg tttctctcca gtggtgtcat ggaaagcagt atcttctcca tacaatgatg 6960
 tgtgataata ttcagtgtat tgccaatcag ggaactcaac tgagccttga ttatattgga 7020
 gcttggttgc acagacatgt cgaccacctt catggctgaa cttagtact tagccctcc 7080
 agacgtctac agctgatagg ctgtaacca acattgtcac cataaatcac attgttagac 7140
 tatccagtgt ggccaagct cccgtgtaa cacaggcact ctaaacaggc aggatatttc 7200
 aaaagcttag agatgacctc ccaggagctg aatgcaaaga cctggcctct ttgggcaagg 7260
 agaatccttt accgcacact ctcttcaca gggttattgt gaggatcaaa tgtggtcatg 7320
 tgtgtgagac accagcacat gtctggtgt ggagagtgc ttctatgtgt gctaacattg 7380
 ctgagtgtga agaaagtatt aggcattggt ttcagcactc acagatgtc atctaactct 7440
 cacaacatgg ctacaggtg ggcactacta gctcatttg acagaggaaa ggactgtgga 7500
 taagaagggg gtgaccaata ggtcagagtc attctggatg caaggggctc cagaggacca 7560
 tgattagaca ttgtctgcag agaaattatg gctggatgtc tctgccccgg aaagggggat 7620
 gcactttcct tgaccccta tctcagatct tgactttgag gttatctcag acttctcta 7680
 tgataccagg agcccatcat aatctctctg tgtctctcc ccttctcag tcttactgcc 7740
 cactcttccc agctccatct ccagctggcc aggtgtagcc acagtaccta actctttgca 7800
 gagaactata aatgtgtatc ctacagggga gaaaaaaaaa aagaactctg aaagagctga 7860
 cattttaccg acttgcaaac acataagcta acctgccagt tttgtgctgg tagaactcat 7920
 gagactcctg ggtcagaggc aaaagatttt attaccaca gctaaggagg cagcatgaac 7980
 tttgtgttca catttgttca ctttgcccc caattcatat gggatgatca gagcagttca 8040
 ggtggatgga cacaggggtt tgtggcaaag gtgagcaacc taggcttaga aatcctcaat 8100
 ctataagaa ggtactagca aactgtcca gtctttgtat ctgacggaga tattatcttt 8160
 ataattgggt tgaaagcaga cctactctgg aggaacatat tgtatttatt gtctgaaca 8220
 gtaaacaat ctgctgtaaa atagacgtta actttattat ctaaggcagt aagcaaacct 8280
 agatctgaag gcgataccat cttgcaaggc tatctgctgt acaaatatgc ttgaaaagat 8340
 ggtccagaaa agaaaacggt attattgcct ttgctcagaa gacacacaga aacataagag 8400
 aaccatggaa aattgtctcc caacactgtt caccagagc cttcactct tgtctgcagg 8460
 acagtcttaa catcccatca ttagtgtgtc taccacatct ggcttcaccg tgcctaacca 8520

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APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTS: /AN		

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
 Inventor: Daniel R. HENDERSON and Eric R. SCHU
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FIGURE 16F

agatttctag gtccagttcc ccaccatgtt tggcagtgcc ccactgccaa cccagaata 8580
 agggagtgtc cagaattccg aggggacatg ggtggggatc agaacttctg ggcttgagtg 8640
 cagagggggc ccatactcct tggttccgaa ggaggaagag gctggagggtg aatgtccttg 8700
 gaggggagga atgtgggttc tgaactctta aatccccaag ggaggagact ggtaagggtcc 8760
 cagcttccga ggtactgacg tgggaatggc ctgagagggtc taagaatccc gtatcctcgg 8820
 gaaggagggg ctgaaattgt gaggggttga gttgcagggg tttgttagct tgagactcct 8880
 tgggtgggtcc ctgggaagca aggactggaa ccattggctc cagggttttg tgtgaaggta 8940
 atgggatctc ctgattctca aagggtcaga ggactgagag ttgcccatgc tttgatcttt 9000
 ccatctactc cttactccac ttgagggtaa tcacctactc ttctagttcc acaagagtgc 9060
 gcctgcgcga gtataatctg cacatgtgcc atgtcccagag gcctgggggca tcatccactc 9120
 atcattcagc atctgcgcta tgcgggcgag gccgggcgcca tgacgtcatg tagctgcgac 9180
 tatccctgca gcgcgcctct cccgtcacgt cccaaccatg gagctgtgga cgtgcgtccc 9240
 ctggtggatg tggcctgcgt ggtgccaggc cggggcctgg tgtccgataa agatcctaga 9300
 accacaggaa accaggactg aaaggtgcta gagaatggcc atatgtcgct gtccatgaaa 9360
 tctcaaggac ttctgggttg agggcacagg agcctgaact tacgggtttg cccaggtcca 9420
 ctgtcctccc aagtgagtct cccagatacg aggactgtg ccagcatcag cttcatctgt 9480
 accacatctt gtaacaggga ctaccaggga ccctgatgaa caccatggtg tgtgcaggaa 9540
 gaggggggtga aggcattggac tcctgtgtgg tcagagccca gaggggggcca tgacgggtgg 9600
 ggaggaggct gtggactggc tcgagaagtg ggatgtggtt gtgtttgatt tcctttggcc 9660
 agataaagtg ctggatatag cattgaaaac ggagtatgaa gaccagttag aatggagggt 9720
 caggttgag ttgagttaca gatggggtaa aattctgctt cggatgagtt tggggattgg 9780
 caatctaaag gtggtttggg atggcatggc tttgggatgg aaatagggtt gtttttatgt 9840
 tggctgggaa ggggtgtggg attgaattgg ggatgaagta ggtttagttt tggagataga 9900
 atacatggag ctggctattg catgcgagga tgtgcattag tttggtttga tctttaata 9960
 aaggaggcta ttaggggtgt cttgaattag attaagttgt gttgggttga tgggttgggc 10020
 ttgtgggtga tgtggttga ttgggctgtg ttaaattggt ttgggtcagg ttttgggtga 10080
 gggtatcatg gggatgagga tatgcttggg acatggattc aggtggttct cattcaagct 10140
 gaggcaaatt tcctttcaga cggtcattcc agggaaacgag tggttgtgtg ggggaaatca 10200

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APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
CHAIRSMAN		

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
 Inventor: Daniel R. HENDERSON and Eric R. SCHU
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FIGURE 16G

ggccactggc tgtgaatata cctctatcct ggtcttgaat tgtgattata tatgtccatt 10260
 ctgtctcctt cactgtactt ggaattgata tggtcattca gctggaaatg ggggaagatt 10320
 ttgtcaaatt cttgagacac agctgggtct ggatcagcgt aagccttctt tctgggtttta 10380
 ttgaacagat gaaatcacat tttttttttt aaaatcacag aaatcttata gagttaacag 10440
 tggactctta taataagagt taacaccagg actcttattc ttgattcttt tctgagacac 10500
 caaaatgaga tttctcaatg ccaccctaata tctttttttt tttttttttt tttttgagac 10560
 acagtctggg tcttttgctc tgtcactcag gctggagcgc agtgggtgtga tcatagctca 10620
 ctgaaccctt gacctcctgg acttaaggga tcctcctgct tcagcctcct gagtagatgg 10680
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 aagggtctca ctttggtgcc ctggctgata ttgaacttct gacttcaagt gattcttcag 10800
 ccttggactc ccaaagcact gggattgctg gcatgagcca ctcaccgtgc ctggcttgca 10860
 gcttaatctt ggagtgtata aacctggctc ctgatagcta gacatttcag tgagaaggag 10920
 gcattggatt ttgcatgagg acaattctga cctaggaggg cagggtcaaca ggaatccccg 10980
 ctgtacctgt acgttggtaca ggcatggaga atgaggagtg aggaggccgt accggaaccc 11040
 catattgttt agtggacatt ggattttgaa ataataggga acttgggtctg ggagagtcat 11100
 atttctggat tggacaatat gtggtatcac aaggttttat gatgagggag aaatgtatgt 11160
 ggggaaccat tttctgagtg tggaagtga agaatacagag agtagctgaa tgccaacgct 11220
 tctatttcag gaacatggta agttggaggt ccagctctcg ggctcagacg ggtataggga 11280
 ccaggaagtc tcacaatccg atcattctga tatttcaggg catattaggt ttgggggtgca 11340
 aaggaagtac ttgggactta ggcacatgag actttgtatt gaaaatcaat gattggggct 11400
 ggccgtgggtg ctcacgctg taatctcact actttgggag accgaagtgg gaggatggct 11460
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 attaaaaatt agctggatgt ggtggtgcat gcttgtggtc tcagctatcc tggaggctga 11580
 gacaggagaa tcggttgagt ctgggagttc aaggctacag ggagctgcga tcacgccgct 11640
 gcactccagc ctgggaaaca gagtgagact gtctcagaat ttttttaaaa aagaatcagt 11700
 gatcatccca acccctgttg ctgttcatcc tgagcctgcc ttctctggct ttgttcctta 11760
 gatcacatct ccatgatcca taggccctgc ccaatctgac ctcacaccgt gggaatgcct 11820
 ccagactgat ctagtatgtg tggaacagca agtgcctggct ctcctccccc tccacagct 11880
 ctgggtgtgg gaggggggtg tccagcctcc agcagcatgg ggagggcctt ggtcagcatc 11940

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APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
INVENTOR		

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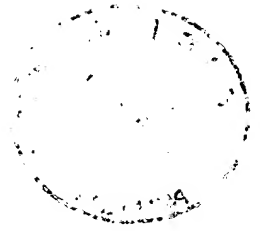


FIGURE 16H

taggtgcaa cagggcaagg gcggggctct ggagaatgaa ggctttatag ggctcctcag 12000
 ggaggccccc cagcccacaa ctgcaccacc tggccgtgga caccggt 12047

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APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
CRAFTSMAN		

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS

Inventor: Daniel R. HENDERSON and Eric R. SCHMIDT

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FIGURE 17

cgagcggccc ctcagcttcg gcgcccagcc ccgcaaggct cccggtgacc actagagggc 60
 gggaggagct cctggccagt ggtggagagt ggcaaggaag gaccctaggg ttcctcgag 120
 cccaggttta ctcccttaag tggaaatttc ttccccact cctccttggc tttctccaag 180
 gagggaaacc aggctgctgg aaagtccggc tggggcgggg actgtgggtt caggggagaa 240
 cggggtgtgg aacgggacag ggagcggtta gaagggtggg gctattccgg gaagtgggtg 300
 ggggagggag cccaaaacta gcacctagtc cactcattat ccagccctct tatttctcgg 360
 ccgctctgct tcagtggacc cggggagggc ggggaagtgg agtgggagac ctaggggtg 420
 gcttcccgac cttgctgtac aggacctga cctagctggc tttgttcccc atccccacgt 480
 tagttgttgc cctgaggcta aaactagagc ccaggggccc caagttccag actgcccctc 540
 cccctcccc cggagccagg gagtggttgg tgaaaggggg aggccagctg gagaacaaac 600
 gggtagtcag ggggttgagc gattagagcc cttgtaccct acccaggaat ggttggggag 660
 gaggaggaag aggtaggagg taggggaggg ggcgggggtt tgtcacctgt cacctgctcg 720
 ctgtgcctag ggcgggaggc cggggagtgg ggggaccggt ataaagcggg aggcgcctgt 780
 gcccgctcca cctctcaagc agccagcgcc tgctgaatc tgttctgcc cctccccacc 840
 catttcacca ccaccatg 858

09732169-100201

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
 Inventor: Daniel R. HENDERSON and Eric R. SCHUUR
 Application No.: 09/732,169
 Docket No.: 348022000201

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FIGURE 18

aagcttccac aagtgcattt agcctctcca gtattgctga tgaatccaca gttcaggttc 60
 aatggcggttc aaaacttgat caaaaatgac cagactttat attcttacac caacatctat 120
 ctgattggag gaatggataa tagtcatcat gtttaaacad ctaccattcc agttaagaaa 180
 atatgatagc atcttgttct tagtcttttt cttaataggg acataaagcc cacaaataaa 240
 aatatgcctg aagaatggga caggcattgg gcattgtcca tgcctagtaa agtactccaa 300
 gaacctatct gtatactaga tgacacaatg tcaatgtctg tgtacaactg ccaactggga 360
 tgcaagacac tgcccatgcc aatcatcctg aaaagcagct ataaaaagca ggaagctact 420
 ctgcaccttg tcagtgaggt ccagatacct acag 454

09732169-100201

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Title: TISSUE SPECIFIC ADENOVIRAL VECTORS
 Inventor: Daniel R. HENDERSON and Eric R. SCHUBERT
 Application No.: 09/732,169
 Bucket No.: 348022000201

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g atg acc ggc tca acc atc gcg ccc aca acg gac tat cgc aac acc act 49
 Met Thr Gly Ser Thr Ile Ala Pro Thr Thr Asp Tyr Arg Asn Thr Thr
 1 5 10 15

gct acc gga cta aca tct gcc cta aat tta ccc caa gtt cat gcc ttt 97
 Ala Thr Gly Leu Thr Ser Ala Leu Asn Leu Pro Gln Val His Ala Phe
 20 25 30

gtc aat gac tgg gcg agc ttg gac atg tgg tgg ttt tcc ata gcg ctt 145
 Val Asn Asp Trp Ala Ser Leu Asp Met Trp Trp Phe Ser Ile Ala Leu
 35 40 45

atg ttt gtt tgc ctt att att atg tgg ctt att tgt tgc cta aag cgc 193
 Met Phe Val Cys Leu Ile Ile Met Trp Leu Ile Cys Cys Leu Lys Arg
 50 55 60

aga cgc gcc aga ccc ccc atc tat agg cct atc att gtg ctc aac cca 241
 Arg Arg Ala Arg Pro Pro Ile Tyr Arg Pro Ile Ile Val Leu Asn Pro
 65 70 75 80

cac aat gaa aaa att cat aga ttg gac ggt ctg aaa cca tgt tct ctt 289
 His Asn Glu Lys Ile His Arg Leu Asp Gly Leu Lys Pro Cys Ser Leu
 85 90 95

ctt tta cag tat gat taa 307
 Leu Leu Gln Tyr Asp
 100

FIGURE 19

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